



MEMOR

ANDUM

APRIL 10, 2004

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TO: BOARD OF DIRECTORS

FROM: DAVID MERRITT

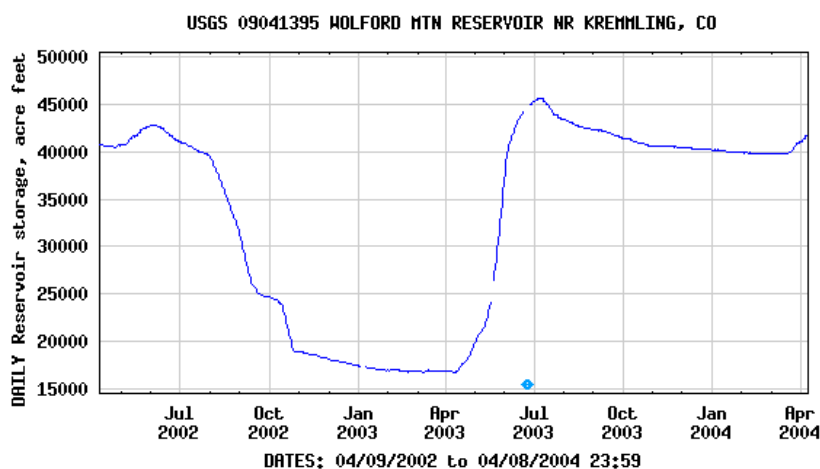
RE: WATER PROJECTS ENTERPRISE - WOLFORD MOUNTAIN RESERVOIR OPERATIONS

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## WOLFORD MOUNTAIN OPERATIONS-YEAR 2004

### HYDROLOGIC CONDITIONS

This is shaping to be a poor year, with basin wide snowpack well below average. However, we still have hope of some recovery in storage at the Reservoir. Wolford Mountain Reservoir is currently at elevation 7471MSL, 18 feet below full pool and 29 feet above where we were this time last year. We have approximately 42,000 acre feet in storage, and have set the outflow to 15 cfs, allowing us to store about 100 acre feet/day. This flow rate will remain constant until May 1st, when is it expected that the downstream call comes on at Muddy Creek, unless the Cameo Call comes on earlier. We are definitely the beneficiary of the maintenance work at the Shoshone Hydropower Plant. Wolford Mountain Reservoir was very lightly exercised last year, with releases only made for water marketing contract releases and mitigation area releases. We will be going into the runoff season only slightly below where we finished last years fill season.



#### EXPLANATION

- DAILY OBSERVATION AT MIDNIGHT RESERVOIR STORAGE
- ◆ Equipment malfunction

What a difference three months make. The January 1st runoff forecast was for 100% of average, or 60,000 acre-feet in the April through July time period, while the April 1st Forecast is for only 50%.

With the changed call scenario, we may be able to store 16,000 to 20,000 acre feet. Last years runoff was 38,200 acre feet, or 64% of average and we managed to store about 29,000 acre feet.

We are now anticipating a very large Substitution year, 30,000 acre feet. The Blue River Basin is at about 60% of average, a condition very similar to April 2002.

	2002	2004
Runoff above Dillon	105 KAF	100 KAF
Runoff Above GMR	185 KAF	180 KAF
Dillon Storage	192 KAF	211 KAF
Green Mountain Storage	70 KAF	69 KAF
Wolford Mtn Storage	41 KAF	42 KAF

However, we do also have significant differences from 2002, which may ameliorate some of our concerns:

- 1) Public Service Company has taken the Shoshone Power Plant completely “off-line” for major servicing from late March until Mid-May, when they will bring one turbine back on line, with the second one due to come back in Mid June. This has removed the replacement requirement of the Colorado-Big Thompson Project and Denver’s Moffat and Roberts Tunnels systems, reducing the demand on both Green Mountain and Williams Fork Reservoirs, and has actually allowed all upstream reservoirs and diverters to come into priority. Wolford should normally be in a bypass mode by this time.
- 2) John Henz is still standing by his predication of a wet spring, which has so far come to pass. We have actually seem some slight recovery in the snowpack curves in the past few days, and the wet weather has taken some of the early demand off the system.
- 3) Water providers and water users have become more aware of the continuing drought, and are quicker to react. In 2002, most of the major organizations on either side of the hill did still not full recognize the depth of the situation.
- 4) I believe that any calls that come on will be somewhat “softer” with all parties willing to work together to preserve storage and streamflow.

The major demands which we expect on Wolford will be significant this year. They will be:

- 1) **Denver Substitution:** Under the most probable scenario, Denver will have about 17,000 acre feet in its pool, and would call on all of that amount.
- 2) **Colorado Springs Substitution:** The Substitution Agreement is being treated as operational, while it winds its long way through final approval. CSU released 150 acre feet for the benefit of the Upper Blue last year, and will be purchasing 250 acre feet in 2003/2004 and 250 acre feet in 2004/2005 water years. This will mean allow CSU to divert, and will place a demand of 650 acre feet on the reservoir.
- 3) **Endangered Fish Pools:** In 2002 and in 2003, the Recovery Program received no water from the 5412 contract (due to drought provisions), and took no water from their 6,000 acre foot pool in 2003, preferring to keep it in storage for worse times. They currently have

2,966 acre feet in storage, with the potential to store an additional 1,600 to 2,000 acre feet this spring. Additionally, if we are able to get Wolford up to 56,000 acre feet by June 1st, and if the May 1st Forecast is greater than 28,000 acre feet, then we will be committed to make the 5,412 acre foot releases this year.

- 4) We have approximately 1,700 acre feet of water marketing contracts which can only be supplied from Wolford, once Shoshone is back in operation.
- 5) We will have releases for the wetlands mitigation area and for Middle Park Water Conservancy District demands.

When the year is done, if we are able to have 60,000 acre feet in storage by June 30, and if the spring is not wet, we will most likely be down to 30,000 acre feet by November 1st. Not an ideal situation, but then the reservoir was built to be used, and it has definitely been getting used these past few years.

## **RECREATION AREA MANAGEMENT**

Red Mountain RV Park have completed their second season of operating the campground, recreation area, and boat rental facility. The Miller's and their host camper staff have taken a great deal of pride in operating the area in a friendly manner. The campground was full most weekends from Independence Day to Labour Day, with weekdays running usually around ½ to 1/3 full. The Millers are expanding the boat rental fleet, and hoping to have sufficient water in the reservoir to justify the investment.

## **TAMARISK CONTROL**

ECO-RX spent more time than anticipated this winter working on the Tamarisk control operation. This year's contract was for a two season operation, winter and fall. The greater extent of the infestation resulted in more expenditure this winter than was anticipated. When the billing is reconciled, a contract increase will need to be authorized to allow the fall's work to be completed.

## **WATER MARKETING**

We currently have 73 contracts for Colorado River water supplies either executed or moving through the process, totaling over 3616 acre feet. Nearly 1600 acre feet of these contracts could be served from our Ruedi Reservoir water supplies, and in fact were served this past year. The River District had designated 10,000 acre feet from the West Slope's 36,000 acre foot pool as available for water marketing on a long term basis. Our Colorado Springs Substitution agreement has resulted in setting aside a pool of 1,750 acre feet for this purpose, and has thus reduced the marketable yield by 1,250 acre feet (five acre feet of Wolford dry year yield for each one acre foot of Upper Blue Reservoir every year yield). Our "short term" commitment of 5,412.5 acre feet to the Recovery Program is provided from this water marketing pool. However, the drought provisions in our contract with the US Fish and Wildlife Service allow us to "short" that delivery when the reservoir is below 56,000 acre feet on June 1st and the May 1st forecast is for less than 28,000. This situation unfortunately occurred again this past year, and there was no water released for this demand. However, we hope to be beyond that trigger this coming year.

We anticipate that the demand for Wolford Mountain Reservoir water will remain strong, especially in light of the continuing uncertainty over Green Mountain Contracts. We have finalized our third contract for Ruedi Round II water, which brings our total Ruedi water supplies to 1,730 acre feet. The USBR has completed the EA for the Interim Round II 10,825 contract, releasing another 10,635

acre feet for contract from Ruedi and we have initiated a Water Repayment Contract application with the USBR for 5,000 acre feet.. Within our Colorado River Supply program, we have more than fully marketed our current contract amount from Ruedi, if we were to supply all uses below Glenwood Springs solely from Ruedi Reservoir.